



# A Belgian student's dorm room project in 2000 is now a tool used throughout the world in 2008

Dries Buytaert: "The web is changing. User contribution is now what makes or breaks a site. Allowing users to react, participate and contribute while still keeping your site under control can be a huge challenge "

ITAC Meeting 4/11/08

# **Drupal**



- What is it?
- What motivated our interest?
- Where is it used?
- How does it work (demo)?
- Under The Hood



# What is Drupal?

" Dries: A chain of unexpected events"



## An open source content management system (plus)

Dries: "a web application platform used to deliver a wide variety of web applications including single or multi-user blogs, wikis, community networks, digital media portals, and core web content management"

#### The Plus

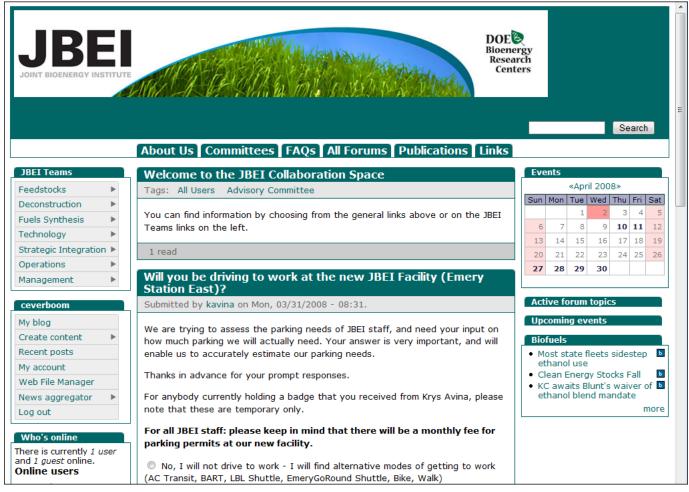
- A development platform with many contributed modules
- A flexible theme approach for different "look and feel"
- Web 2.0 kinds of features (forums, blogs, wiki-like features for collaborative web authoring, RSS feeds, etc)
- Enterprise ready
  - Flexible authorization (permissions, groups)
  - Integrates with LDAP, OpenID
- Flexible deployment (Linux, Mac OSX or Windows, Apache or IIS)



## **JOINT BIOENERGY INSTITUTE (JBEI)**

A JBEI request started us down the Drupal path







## The process that led to Drupal

"Perfect is the enemy of good"



#### Review Wiki's

- http://www.wikimatrix.org/
- ~ 100 to choose from, rapidly evolving, data not always accurate

#### Evaluate Wiki & CMS collaboration alternatives

- Mediawiki (lacking access controls)
- Deki Wiki (lacks tool set great UI however)
- Xwiki (Greg H mixed results w/Potter customers)
- Confluence (commercial wiki)
- Webspace (lack of tools, single source authentication)
- Drupal (CMS with many optional modules)
- Fast Track Evaluation (using our VMWare Virtual Machine infrastructure)
  - VM appliances, VM servers w/typical install

#### Decision

- Drupal chosen for initial prototype for collaboration
- VM for JBEI production site
- VM for IT development
  - VM for IT pilot use



## Where is it used?



#### **External Sites (take the tour)**

- http://www.linuxjournal.com/
- http://www.wineinstitute.org/
- http://www.gtri.gatech.edu/
- http://warnerbrosrecords.com/
- http://www.theonion.com/content/index
- http://www.spreadfirefox.com/
- http://www.citris-uc.org/
- http://osuosl.org/

#### LBNL/IT Sites

- hdnews.lbl.gov
- Status.lbl.gov (hosted off site)
- Jbeiwiki.lbl.gov



#### How does it work?

emphasis is on interactive/dynamic content



#### Demo: hdnews.lbl.gov

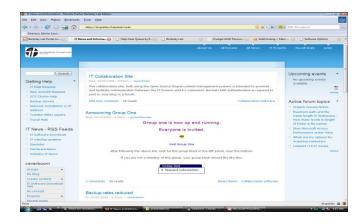
- Blog
- Forum
- Events
- Poll
- Story
- Books
- Every piece of content is termed a "node"
- Custom content (or nodes) can be created extending the standard out of box offering (think of a very low end Filemaker or MS Access tool)
- Users can post comments (if authorized) which adds an interactive quality to the web site



## **Under the Hood - Look and Feel**



# The idea of themes >Core (e.g. Garland) >Contributed (e.g. slash\_blue,) >Do-it-yourself Menu's Editors >TinyMCE >Html >Plain text







## **Under The Hood – RSS Feeds**



#### **Acquire and Categorize feeds**

Administer>Content Management>News Aggregator

1. Add Category

(if more than one feed will be grouped together)

- 2. Add feed(s)
- √ Title
- ✓URL (from syndication site)



- ✓ Update Interval
- √ Categorize news item (if appropriate)

#### Create menu

Administer>Site Building>Menus

- 1. Add Menu (e.g. IT News RSS Feeds)
- 2. Add Menu Items
- √Title
- ✓ Description
- √ Path (relative to drupal)
  - >Aggregator/sources/9
  - > Aggregator/categories/6
- 3.Activate (and locate) block

#### News feeds from the BBC

- \*What are news feeds?
- \*How can I use them?
- \*How do I get a news reader?
- •Can I use these feeds on my site?
- •Can I create my own BBC News feeds?



#### IT News - RSS Feeds

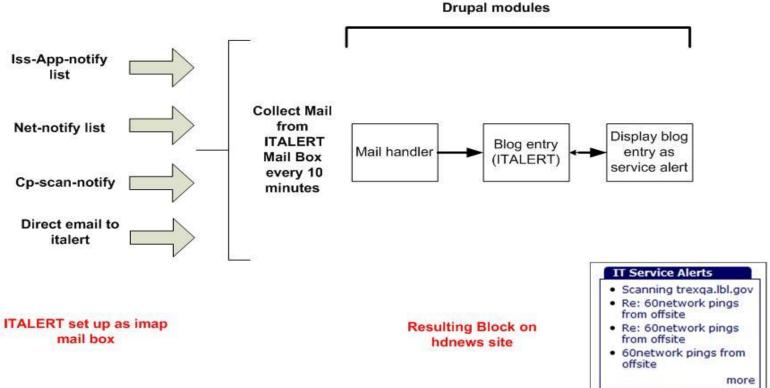
- IT Software Download
- IT wiki/faq updates
- Slashdot
- Hardware News
- · Industry IT News



## **Under The Hood – IT Service Alerts**









## **Authentication**



#### **Current Environment**

- LDAP for local users
- Local account database for external users

## **Collaborative Environment**

- Local users by Single Sign On (SSO)
- External users through OpenID
- High trust through Shibboleth (UCTrust)



## **Authorization**

(the third approach we have explored)



#### **Roles and Organic groups**

- 1. Roles allow group creator rights
- 2. Organic groups
- Allow for groups, subgroups
- Flexible subscription
  - ✓ Private
  - √ Public
  - ✓ By invitation
- Flexible access
  - Allows content to be restricted to group members
  - Allows group edits of a piece of content
  - Allows filtered lists of content by group





# **Next Steps**



- Continue to use hdnews.lbl.gov to help manage our Novell conversion effort
- Solicit feedback from the lab community should this technology continue to be used for other purposes?

